

## **PERMIT CENTER**

# **HANDOUT ON CROSS CONNECTION BACKFLOW**

**Informational Brochure**

**February 2020**

**Prepared by:**

**City of Auburn**

Customer Service Center

(253) 931-3010

FAX (253) 931-3053



## **Introduction**

The City of Auburn is responsible for protecting Auburn's public water system. This is done by making sure that contaminants from private property do not back up into the public water system. As required by State Law (WAC 246-290-490) and Auburn City Code (ACC 13.12.040), the City of Auburn Cross Connection Control program ensures that all commercial businesses, irrigation systems and fire line connections have backflow prevention devices installed.

## **Who Needs Backflow Protection?**

The Washington Administrative Code lists specific high hazard facilities, and the City cross connection control program requires each water service that does not serve a single family home to have premise isolation backflow protection, unless the single family home has an in-ground irrigation system. Premise isolation is backflow prevention installed at the incoming source to the property, usually at the water meter. Reduced Pressure Backflow Assembly (RPBA) is most often needed. Double Check Valve Assembly (DCVA) can be used in some instances.

- |  |      |
|--|------|
| • New commercial building or updating existing commercial space        | RPBA |
| • New multi-family building or updating existing multi-family building | RPBA |
| • Lawn irrigation system without chemicals                             | DCVA |
| • Fire sprinkler system without chemicals                              | DCVA |

## **What is Needed to Install Backflow Protection?**

1. Fill out the Utility Application and pay permit fee.
2. Call the City Cross Connection Specialist (253-931-3064) to discuss the location of the device.
3. For installation involving a new water meter, coordinate with the City to provide water for testing the backflow device. Backflow device must be installed and tested within 24 hours of installation of the meter.
4. Have the device installed by the plumber and tested by a Certified Backflow tester. A list of testers and installation details are included with this handout.
5. Call the City (253-931-3064) for inspection and approval of the permit. Please give the staff 24 hours' notice. This must be completed before the final approval of your project.

## **What is Needed to Maintain Backflow Protection?**

Backflow devices need to be tested annually to ensure that they are functioning properly to protect your health and to prevent contaminants and pollutants from entering the public water system. To achieve that, it is important for you to:

- Hire a certified backflow testing company to perform the annual test and to
- Submit the test results to the City.

For information about the companies who are registered to perform backflow assembly testing in the City of Auburn, please see the attachment for the City's 2019 Registered Backflow Assembly Testers list.

**If you have questions, please contact the City of Auburn Cross Connection Control Program at 253-931-3064**

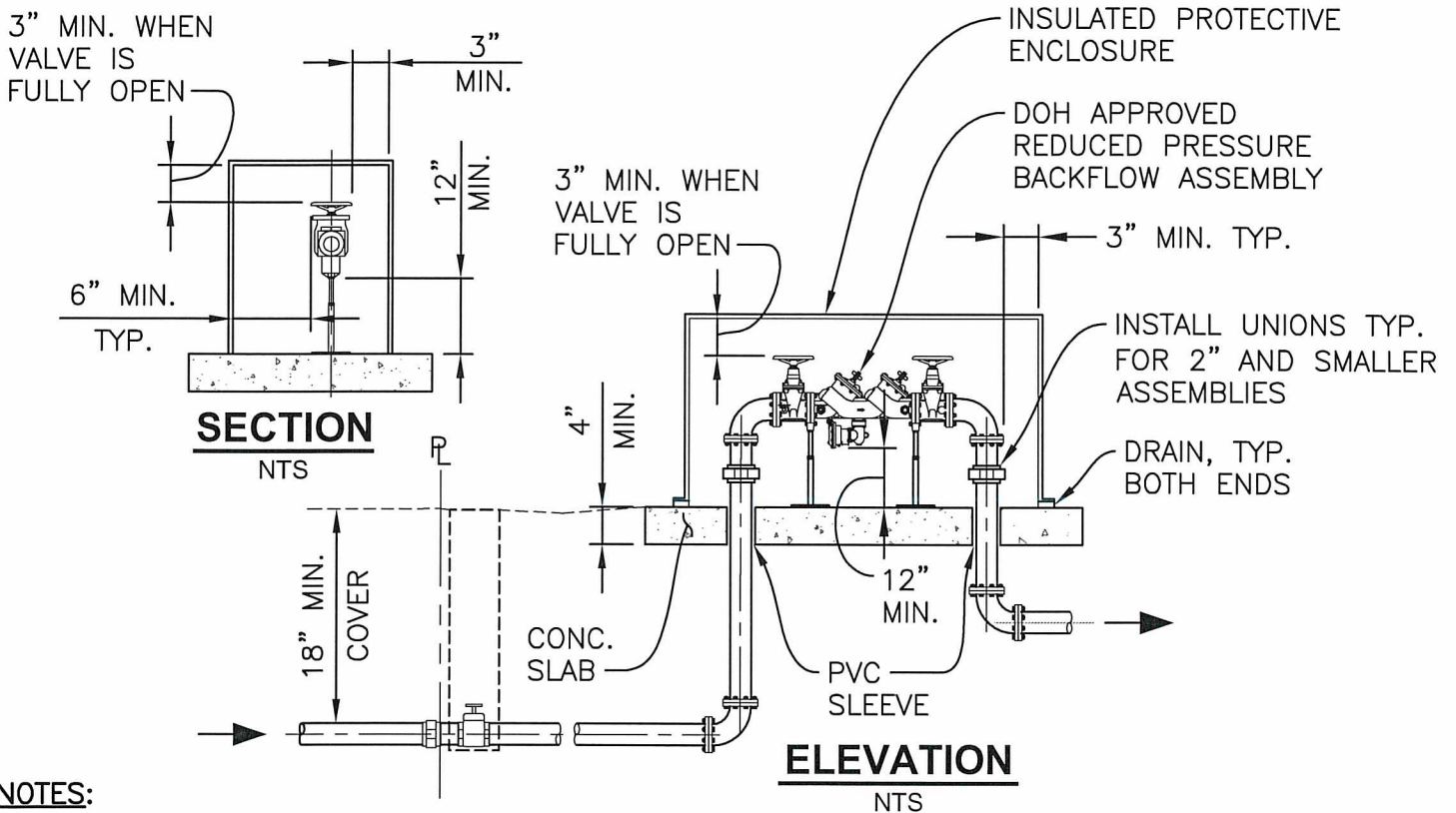
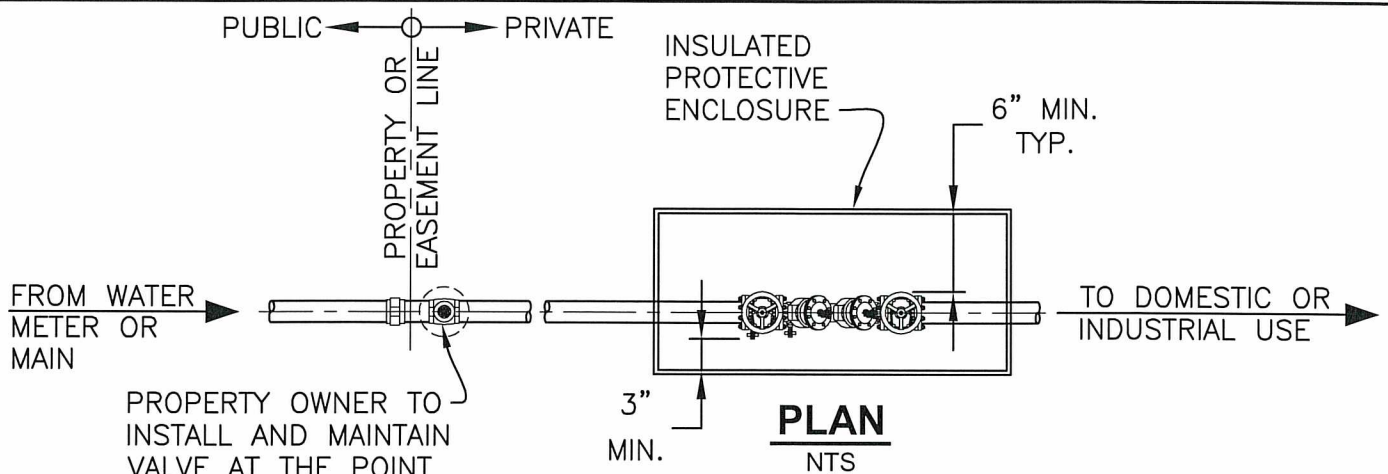
## **2020 City of Auburn Registered Backflow Assembly Testers**

**Only test reports from City of Auburn registered testers will be accepted.** The Backflow Testers listed below are registered to test within the City's Water System and have chosen to be on this list. There are Backflow Testers not on this list that have registered to test in Auburn. For verification please email [backflowtest@auburnwa.gov](mailto:backflowtest@auburnwa.gov) or call 253-931-3064

<b>DM Backflow Testing</b> James Dravis	<b>253-227-8858</b>
<b>The Plumbing Joint</b> Larry Miller <a href="http://www.plumbingjoint.com">www.plumbingjoint.com</a>	<b>425-228-3204</b>
<b>Backflows Only, LLC</b> Paul Frederick	<b>253-606-4104</b>
<b>Fire Systems West</b> Justin Griffith-Brendan Fisher	<b>253-833-1248</b>
<b>Backflows Northwest Inc.</b> Chris Sutton-Caleb Holmes-Scott Radcliffe-Tyler Jansen-Charles Smith-AJ Brevick <a href="http://www.backflowsnorthwest.com">www.backflowsnorthwest.com</a>	<b>425-277-2888</b>
<b>DB Plumbing</b> Dale Baxmann	<b>206-795-9192</b>
<b>Auburn Mechanical</b> Logan Shefelbine-Kurt Cushman-John Stokes <a href="http://www.auburnmechanical.com">www.auburnmechanical.com</a>	<b>253-838-9780</b>
<b>The Safety Team, Inc</b> Scott Parfitt-Stephen Ellisor-Fue Thao-Kenneth Keith <a href="http://www.thesafetyteaminc.com">www.thesafetyteaminc.com</a>	<b>206-762-1450</b>
<b>Campbell's Backflow, Landscaping &amp; Irrigation</b> Bradley Campbell	<b>253-426-2321</b>
<b>Cross Connection Specialist, LLC</b> Nancy Perry	<b>253-318-3156</b>
<b>Nautilus Backflow Service</b> Rodger Dent	<b>253-564-1905</b> <b>253-686-9263</b>
<b>P.L.E. Backflow Testing</b> Michael Gittings <a href="http://www.backflowtester.com">www.backflowtester.com</a>	<b>253-297-4387</b>
<b>Ace Backflow Only</b> Terry Leonard <a href="http://www.acebackflow.com">www.acebackflow.com</a>	<b>253-250-1295</b> <b>253-756-6626</b>
<b>Royal Waldock Associates</b> Mark Barfield	<b>253-549-5573</b> <b>253-208-0249</b>
<b>Campbell Underground LLC</b> Mark A. Campbell	<b>253-606-1301</b>
<b>Dennehy's Backflow Service</b> Sean Dennehy	<b>206-919-9235</b>
<b>Olympic Landscape LLC</b> Nick Vigil-Jonathan Walle <a href="http://www.olympiclandscape.com">www.olympiclandscape.com</a>	<b>253-922-7075</b>
<b>AWA Backflow</b> Jeff Hansen <a href="http://www.AWABackflow.com">www.AWABackflow.com</a>	<b>206-369-5660</b>

<b>Affordable Washington Backflow, LLC</b> David Foy-Jeff Hansen-Marshal Menehan <a href="http://www.washingtonbackflowtesting.com">www.washingtonbackflowtesting.com</a>	<b>206-972-7505</b> <b>425-892-4808</b>
<b>A+ Backflow Inc.</b> Dave Kuca <a href="http://www.Aplusbackflowtesting.com">www.Aplusbackflowtesting.com</a>	<b>425-830-3749</b>
<b>Pat's Plumbing</b> Jenny Shaw <a href="http://www.patsplumbing.com">www.patsplumbing.com</a>	<b>253-946-5999</b>
<b>Available Backflow Testing-ABT</b> Bryan S Vangstad	<b>206-707-1775</b>
<b>BATMASTER Backflow/ABC Water Specialty</b> Thomas C Gammon-Cody Gobbato <a href="http://www.backflowservice.net">www.backflowservice.net</a> <a href="http://www.abcwaterspecialty.com">www.abcwaterspecialty.com</a>	<b>425-397-0275</b> <b>425-355-9826</b>
<b>Puget Sound Backflow</b> Jake Wiseman <a href="http://www.pugetsoundbackflow.com">www.pugetsoundbackflow.com</a>	<b>206-914-8250</b>
<b>Backflow Systems LLC</b> Manuel Barba <a href="http://www.backflowsystems.net">www.backflowsystems.net</a>	<b>425-569-9252</b> <b>310-251-9809</b>

This list is provided for the convenience of the water service customer. The City of Auburn makes no representation regarding the skill or quality of service of the tester listed above. The City of Auburn does not assume or accept any liabilities for the actions or performance of such testers. Water service customers should use their own judgment with respect to contracting with these or any other testers.



#### NOTES:

1. INSULATED PROTECTIVE ENCLOSURE MUST COMPLY WITH THE AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) 1060 OUTDOOR ENCLOSURES FOR BACKFLOW PREVENTION ASSEMBLIES. IT SHALL BE LOCKABLE WITH A KEY LOCK OR PADLOCK AND SHALL ALLOW FOR MINIMUM CLEARANCES AND PROVIDE ADEQUATE DRAINAGE.
2. RPBA SHALL BE INSTALLED ADJACENT TO THE METER AND HAVE NO BRANCH CONNECTION BETWEEN THE METER AND THE BACKFLOW ASSEMBLY. INSTALL RPBA HORIZONTALLY.
3. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
4. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
5. A MINIMUM OF TWO SUPPORTS MUST FIRMLY ANCHOR THE ASSEMBLY.

APPROVED BY CITY ENGINEER:

DATE:

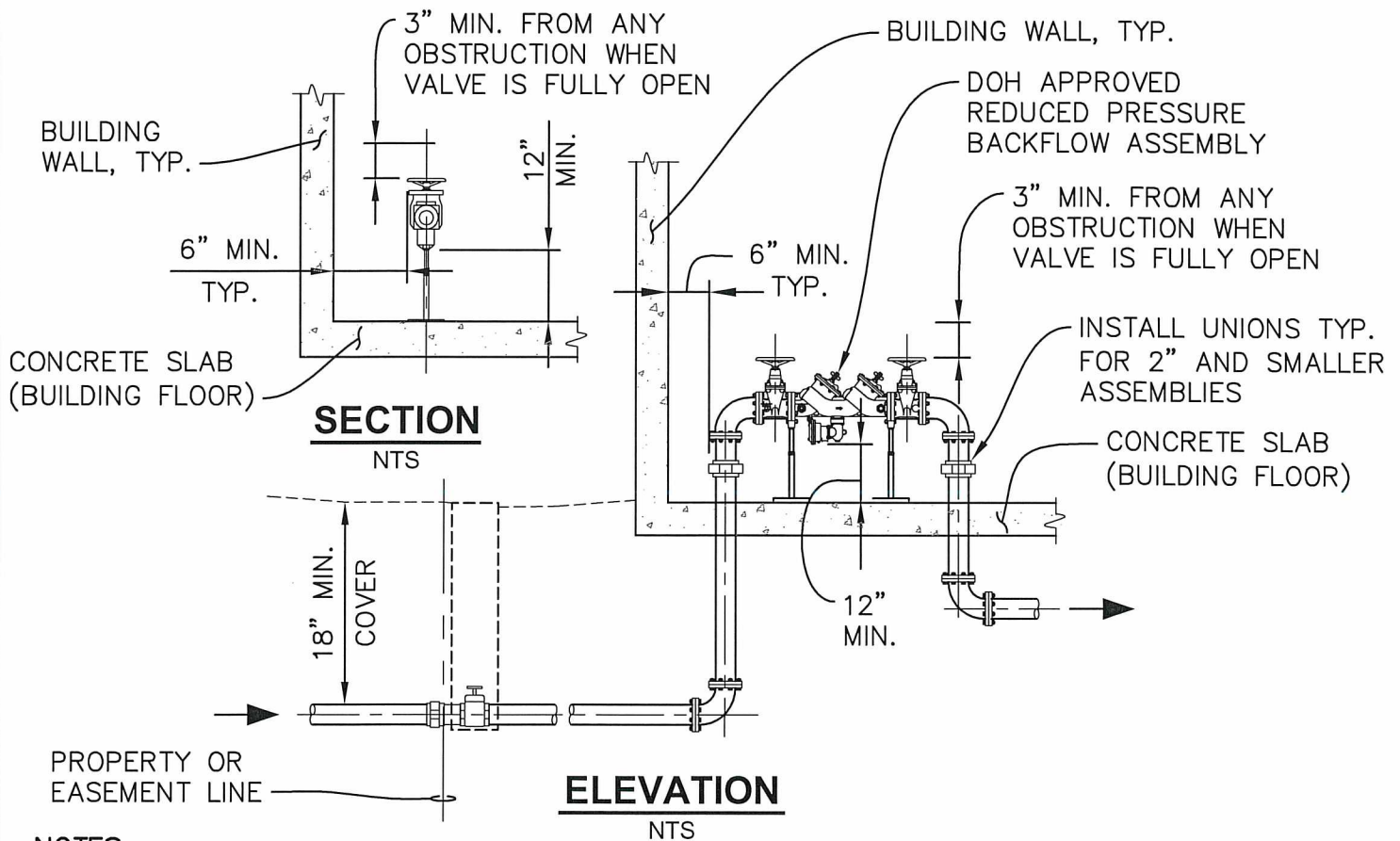
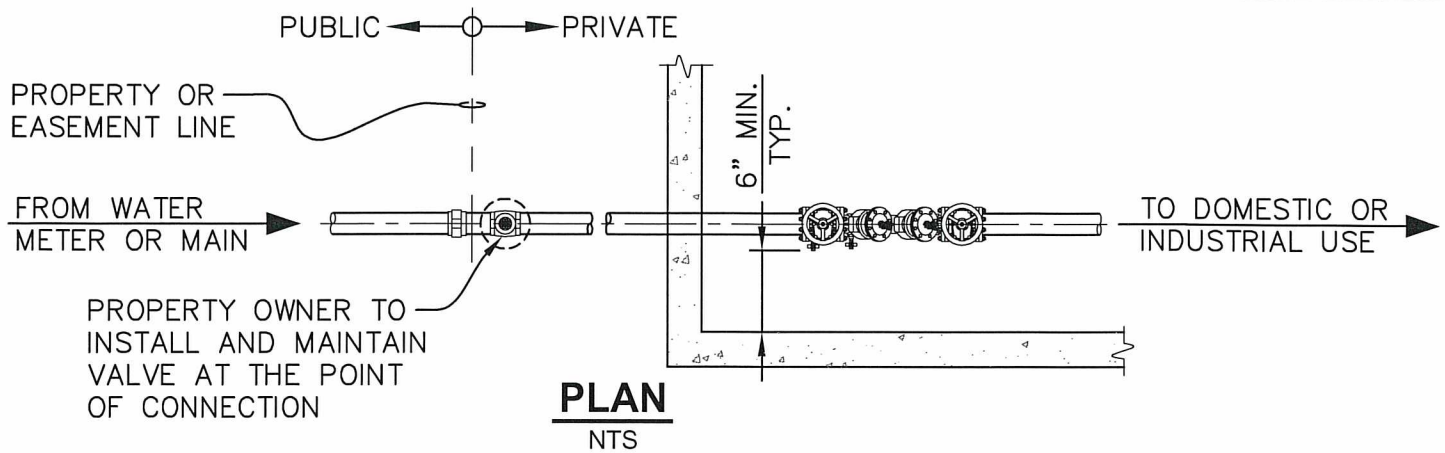
CITY OF  
**AUBURN**  
WASHINGTON

REDUCED PRESSURE BACKFLOW ASSY.  
(OUTSIDE INSTALLATION)

PUBLIC WORKS DEPARTMENT

STANDARD DETAIL: W-22.2





#### NOTES:

1. RPBA INSTALLED INSIDE BUILDING SHALL HAVE NO BRANCH CONNECTIONS BETWEEN THE METER AND THE BACKFLOW ASSEMBLY. INSTALL RPBA HORIZONTALLY.
2. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
3. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
4. A MINIMUM OF TWO SUPPORTS MUST FIRMLY ANCHOR THE ASSEMBLY.
5. ADEQUATE DRAINAGE MUST BE PROVIDED.

APPROVED BY CITY ENGINEER:

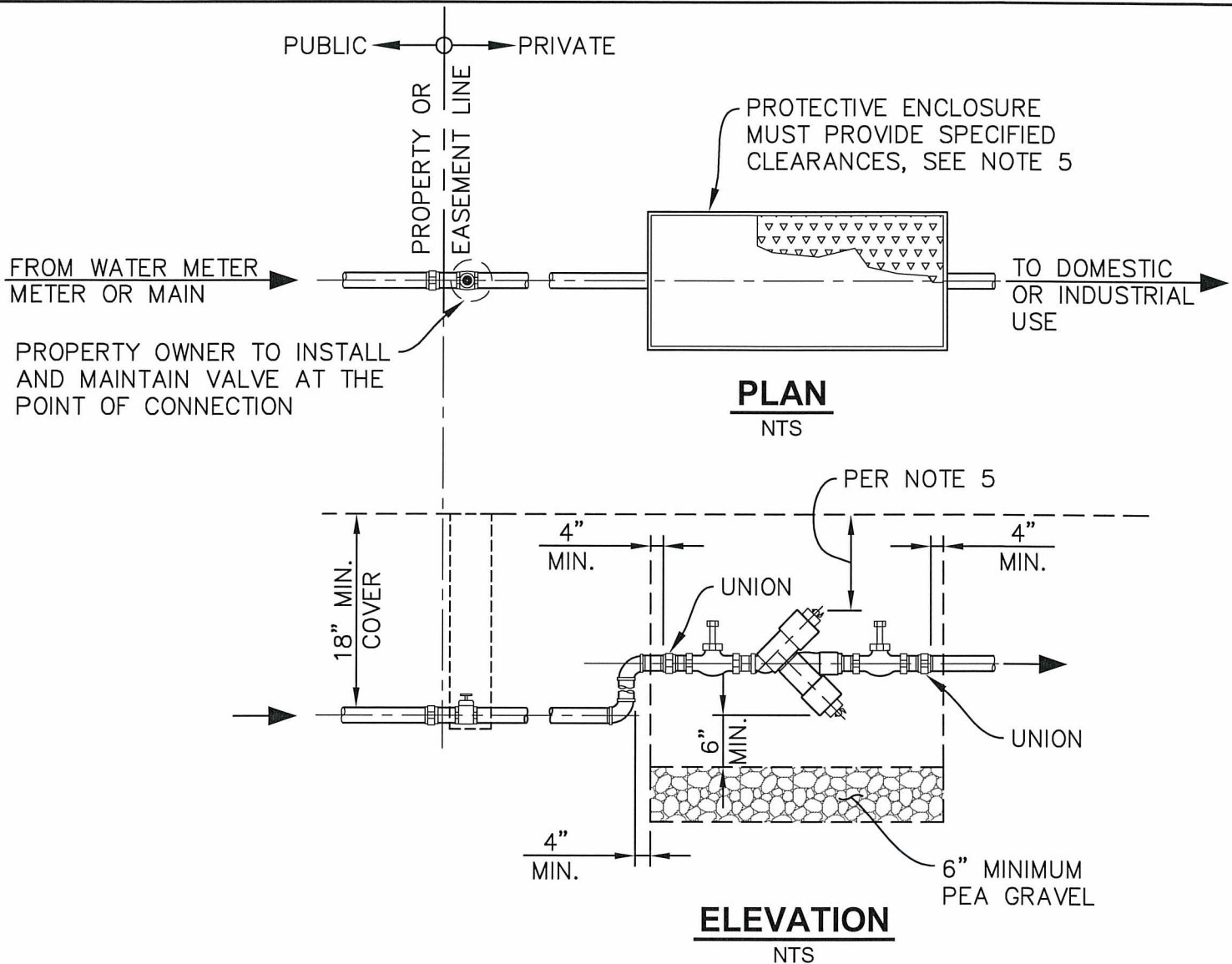
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REDUCED PRESSURE BACKFLOW ASSY.  
(INSIDE INSTALLATION)

PUBLIC WORKS DEPARTMENT

STANDARD DETAIL: W-23.2

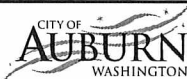


#### NOTES:

1. BACKFLOW ASSEMBLY MUST HAVE ADEQUATE SPACE CONSIDERATIONS FOR PROPER TESTING AND MAINTENANCE. A MINIMUM OF 12" CLEARANCE FROM ANY OBSTRUCTIONS ON THE TEST SIDE. A MINIMUM OF 6" CLEARANCE BELOW ASSEMBLY AND A MINIMUM OF 6" OF PEA GRAVEL IN THE BOTTOM OF THE BOX. THE MINIMUM CLEARANCE FROM THE TOP OF THE PEA GRAVEL TO THE BOTTOM OF THE ASSEMBLY IS 6".
2. DCVA MUST BE INSTALLED WITH TEST COCKS FACING UP. TEST COCKS MUST BE PLUGGED WITH BRASS OR PLASTIC PLUGS. INSTALL DCVA HORIZONTALLY.
3. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
4. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
5. MINIMUM CLEARANCE AT ABOVE ASSEMBLY SHALL BE: 9" (FOR 3/4" METER), 12" (FOR 1" METER), AND 14" (FOR 1 1/2" & 2" METER).

APPROVED BY CITY ENGINEER:

DATE:

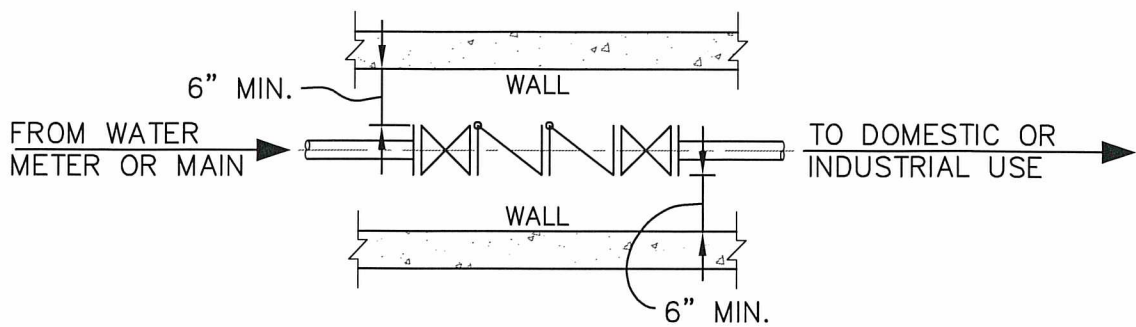


DOUBLE CHECK VALVE ASSEMBLY  
(OUTSIDE INSTALLATION)

PUBLIC WORKS DEPARTMENT

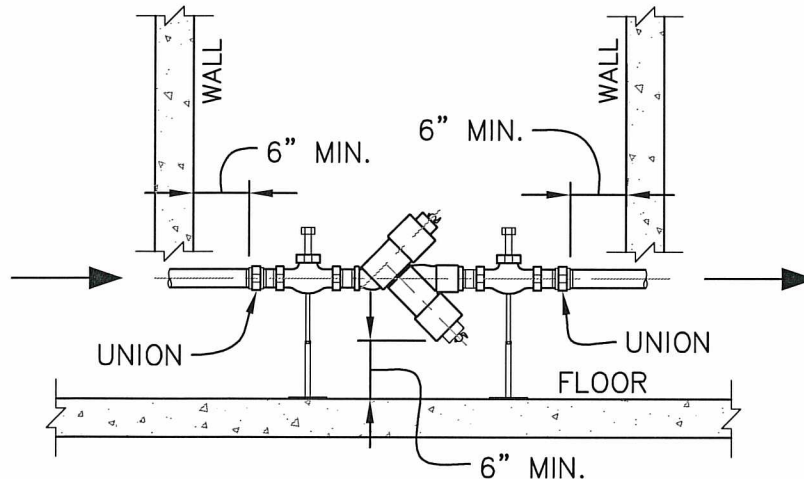
STANDARD DETAIL: W-24.2





## PLAN

NTS



## ELEVATION

NTS

### NOTES:

1. BACKFLOW ASSEMBLY MUST HAVE ADEQUATE SPACE CONSIDERATIONS FOR PROPER TESTING AND MAINTENANCE. A MINIMUM OF 6" SIDE CLEARANCE BETWEEN DCVA AND WALL OR ANY OBSTRUCTIONS AND A MINIMUM OF 6" CLEARANCE BELOW ASSEMBLY SHALL BE PROVIDED.
2. DCVA MUST BE INSTALLED WITH TEST COCKS FACING UP. TEST COCKS MUST BE PLUGGED WITH BRASS OR PLASTIC PLUGS.
3. DCVA INSTALLED INSIDE BUILDING SHALL HAVE NO BRANCH CONNECTIONS BETWEEN THE METER AND THE BACKFLOW ASSEMBLY. INSTALL DCVA HORIZONTALLY.
4. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
5. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
6. TWO SUPPORTS, EITHER WALL OR FLOOR, ONE ON EACH SIDE OF THE ASSEMBLY, MUST FIRMLY ANCHOR THE ASSEMBLY.

APPROVED BY CITY ENGINEER:

DATE:



DOUBLE CHECK VALVE ASSEMBLY  
(INSIDE INSTALLATION)

PUBLIC WORKS DEPARTMENT

STANDARD DETAIL: W-25.2